

10/518320

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number  
WO 03/105795 A1(51) International Patent Classification<sup>7</sup>: A61K 7/32

(21) International Application Number: PCT/EP03/05471

(22) International Filing Date: 22 May 2003 (22.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0213999.6 18 June 2002 (18.06.2002) GB

(71) Applicant (for AE, AG, AU, BB, BZ, CA, CY, GB, GD, GH, GM, IE, IL, KE, LC, LK, LS, MN, MW, NZ, OM, SC, SD, SG, SL, SZ, TT, TZ, UG, VC, ZA, ZM, ZW only): UNILEVER PLC [GB/GB]; Unilever House, Blackfriars, London EC4P 4BQ (GB).

(71) Applicant (for AL, AM, AT, AZ, BA, BE, BF, BG, BJ, BR, BY, CF, CG, CH, CI, CM, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, FR, GA, GE, GN, GQ, GR, GW, HR, HU, ID, IS, IT, JP, KG, KP, KR, KZ, LR, LT, LU, LV, MA, MC, MD, MG, MK, ML, MR, MX, MZ, NE, NI, NL, NO, PH, PL, PT, RO, RU, SE, SI, SK, SN, TD, TG, TJ, TM, TN, TR, UA, UZ, VN, YU only): UNILEVER NV [NL/NL]; Weena 455, NL-3013 AL Rotterdam (NL).

(71) Applicant (for IN only): HINDUSTAN LEVER LIMITED [IN/IN]; Hindustan Lever House, 165/166 Backbay Reclamation, Maharashtra, 400 020 Mumbai (IN).

(72) Inventors: BROWN, Nathan, Charles; Unilever R &amp; D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB). RIELEY, Hugh; Unilever R

&amp; D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB). SMITH, Ian, Karl; Unilever R &amp; D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB). STOCKTON, Joanne, Elizabeth; Unilever R &amp; D Port Sunlight, Quarry Road East, Bebington, Wirral, Merseyside CH63 3JW (GB).

(74) Agents: ELLIOTT, Peter, William et al.; Unilever PLC, Patent Department, Colworth House, Sharnbrook, Bedford, Bedfordshire MK44 1LQ (GB).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIPERSPIRANT EMULSION COMPOSITIONS

(57) Abstract: A w/o emulsion antiperspirant composition comprising a dissolved antiperspirant salt, an emulsifier and, in a disperse phase separate from the dissolved antiperspirant salt, a polymer comprising Brønsted acid groups.

WO 03/105795 A1

## INTERNATIONAL SEARCH REPORT

Intern

Application No

PCT/EP 03/05411

Rec'd PCT/PTO 14 DEC 2004

10/518320

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 A61K7/32		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) IPC 7 A61K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 714 551 A (ROHM & HAAS) 1 September 1954 (1954-09-01) the whole document ---	1-10
A	EP 0 260 030 A (UNILEVER PLC ;UNILEVER NV (NL)) 16 March 1988 (1988-03-16) the whole document ---	1-10
A	US 6 319 491 B1 (WHIPPLE MICHAEL B) 20 November 2001 (2001-11-20) the whole document ---	1-10
A	EP 0 812 182 A (UNILEVER PLC ;UNILEVER NV (NL)) 17 December 1997 (1997-12-17) cited in the application the whole document -----	1-10
<input type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
<b>* Special categories of cited documents :</b>		
<b>*A*</b> document defining the general state of the art which is not considered to be of particular relevance		
<b>*E*</b> earlier document but published on or after the international filing date		
<b>*L*</b> document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		
<b>*O*</b> document referring to an oral disclosure, use, exhibition or other means		
<b>*P*</b> document published prior to the international filing date but later than the priority date claimed		
<b>*T*</b> later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
<b>*X*</b> document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
<b>*Y*</b> document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.		
<b>*Z*</b> document member of the same patent family		
Date of the actual completion of the international search  12 August 2003		Date of mailing of the international search report  20/08/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  Yon, J-M

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Inten Application No

PCT/EP 03/05471

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 714551	A	01-09-1954	NONE	
EP 0260030	A	16-03-1988	AT 81966 T AU 590959 B2 AU 7739487 A BR 8704413 A CA 1296645 C DE 3782479 D1 DE 3782479 T2 EP 0260030 A2 ES 2036576 T3 JP 1797943 C JP 5007364 B JP 63068518 A ZA 8706402 A	15-11-1992 23-11-1989 03-03-1988 19-04-1988 03-03-1992 10-12-1992 29-04-1993 16-03-1988 01-06-1993 12-11-1993 28-01-1993 28-03-1988 26-04-1989
US 6319491	B1	20-11-2001	NONE	
EP 0812182	A	17-12-1997	AU 716526 B2 AU 4432196 A BR 9510451 A DE 69520235 D1 DE 69520235 T2 EP 0812182 A1 WO 9624326 A1 ZA 9600047 A	24-02-2000 27-08-1996 19-05-1998 05-04-2001 21-06-2001 17-12-1997 15-08-1996 04-07-1997